

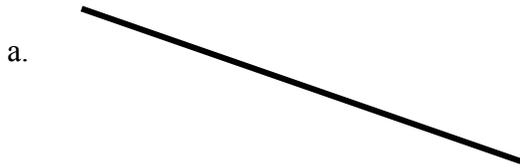
Refresher Math Unit B Test – Practice Form

Ground Rules for Test Completion

1. Present your work in a neat and organized manner. Use complete sentences whenever you are asked to make a statement.
2. SHOW YOUR WORK: Partial credit will be awarded on the basis of the work shown.
3. Make sure you answer ALL parts of problems.
4. To help you review, I've noted related sample problems in brackets. (For example, [A3:1 p3] tells you that part 3 of Sample Problem 1 in Problem Set A3 is similar to the problem at hand.)



1. [18] Answer the following questions about fractions and mixed numbers.
 - a. Use a sketch to represent the fraction $\frac{7}{8}$. [A3:1 p1]
 - b. Use a sketch to represent the mixed number $4\frac{5}{6}$. [A3:2 p1]
 - c. Find the sum of $\frac{7}{8}$ and $4\frac{5}{6}$. [A3:2 p4]
 - d. Find the difference between $4\frac{5}{6}$ and $\frac{7}{8}$. [A3:2 p5]
 - e. Find the product of $4\frac{5}{6}$ and $\frac{7}{8}$. [A3:5]
 - f. Find the quotient of $4\frac{5}{6}$ divided by $\frac{7}{8}$. [A3:7]
2. [6] Write fractions in lowest terms for each of the *parts* described below.
 - a. What fraction of a yard is 14 inches?
 - b. Four days is what fraction of a week?
 - c. If Jeff borrowed \$5,682 to buy his car, what fraction of the loan has he paid after paying \$3,354?
3. [3] Give an example of each of the following:
 - a. improper fraction
 - b. mixed number
 - c. proper fraction
4. [10] Answer the following questions about decimals.
 - a. Convert $\frac{7}{8}$ to a decimal. [B1:5]
 - b. Convert $4\frac{5}{6}$ to a mixed decimal. [B1:7]
 - c. Convert forty-eight hundredths to a fraction in lowest terms. [B1:6]
 - d. Convert 3,605.1208 to a mixed number in lowest terms. [B1:8]
 - e. Express 3,605.1208 in words. [B1:2]
5. [4] Round 1,509,632.528705 to the indicated place values. [B1:3]
 - a. nearest tenth
 - b. nearest hundredth
 - c. nearest hundred
 - d. nearest ten-thousandth
6. [2] Measure each line below to the nearest tenth of a centimeter. [B1:9]



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7. [27] Simplify by doing the indicated operations. For fraction problems, give your answer as a proper fraction or mixed number in lowest terms.

a.
$$\begin{array}{r} 57\frac{4}{15} \\ + 39\frac{17}{20} \\ \hline \end{array}$$

b.
$$\begin{array}{r} 3,967.498 \\ 10,260.07 \\ + 6,535.409 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 76\frac{1}{8} \\ - 58\frac{3}{8} \\ \hline \end{array}$$

d. $81.2891 \div 2.57 =$

e. $7\frac{1}{4} \cdot \frac{7}{10} \cdot \frac{20}{14} =$

f. $17.09 - 4.286 =$

g. $3^3/5 \div 2^9/15 =$

h. $23 + 7 \cdot 3 =$

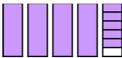
i. $23 - (21 - 17) \cdot 4 =$

8. [30] **Completely solve any 5** of the following using steps (I), (II), and (III) below.

- I. [1] State what it is you are to find. Give your answer as a complete sentence.
- II. [4] Solve the problem, showing your work. Be sure to reduce fractions to proper fractions or mixed numbers in lowest terms.
- III. [1] State the answer in a complete sentence.

- a. Last week Terry worked four-fifths of his normal 35-hour work week. How many hours did Terry work last week?
- b. Jamie bought one dozen cassette tapes at \$1.29 each and a dozen eggs for \$1.89. If the sales tax came to 85¢, what was Jamie’s total bill?
- c. Sally is $2\frac{5}{16}$ inches shorter than her brother. If her brother is $67\frac{1}{4}$ inches tall, how tall is Sally?
- d. How many pieces of wood ten and three-eighths inches long can be cut from a board eight feet long?
- e. After driving 274 miles it took 10.6 gallon’s to fill the gas tank on Tanya’s car. If the gas tank on Tanya’s car holds a total of 16.5 gallons, how far could she drive on one tank of gas at this mileage? Round your answer to the nearest tenth of a unit **during your calculations**.
- f. Larry’s hourly overtime wage is \$12.81. If he gets “time and a half” ($1\frac{1}{2}$ times his regular wage) for overtime work what is his regular hourly wage?
- g. Joan used three trips with her truck to pick up firewood. The first trip she hauled five-eighths of a cord. The second trip she hauled three-fourth of a cord. On the last trip she hauled half of a cord. How many cords of wood did Joan haul?

ANSWER KEY

| | | | | | |
|---|--|--------------------------|---|----------------------|-------------------------------------|
| 1. a.  | b.  | c. $5\frac{17}{24}$ | d. $3\frac{23}{24}$ | e. $4\frac{11}{48}$ | f. $5\frac{11}{21}$ |
| 2. a. $\frac{7}{18}$ | b. $\frac{4}{7}$ | c. $\frac{559}{947}$ | 3. a. B/S | b. W ^S /B | c. S/B (B: Big, S: Small, W: Whole) |
| 4. a. .875 | b. 4.83 | c. $\frac{12}{25}$ | d. 3,605 ¹⁵¹ / ₁₂₅₀ | | |
| e. three thousand six hundred five and one thousand two hundred eight ten-thousandths | | | | | |
| 5. a. 1,509,632.5 | b. 1,509,632.53 | c. 1,509,600 | d. 1,509,632.5287 | | |
| 6. a. 6.2 cm | b. 6.6 cm | 7. a. $97\frac{7}{60}$ | b. 20,762.977 | c. $17\frac{19}{24}$ | d. 31.63 |
| 7e. $7\frac{1}{4}$ | f. 12.804 | g. $1\frac{5}{13}$ | h. 44 | i. 7 | |
| 8. a. 28 hr. | b. \$18.22 | c. $64\frac{15}{16}$ in. | d. 9 pc. | e. 425.7 mi. | |
| f. \$8.54 | g. $1\frac{7}{8}$ cords | | | | |